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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/889,992	01/09/2002	Gilles Lebouill	11345/035001	4719
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22511 7590 10/16/2006

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EXAMINER

SHEPARD, JUSTIN E

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/889,992

Applicant(s)

LEBOUILL, GILLES

Examiner

Justin E. Shepard

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17, 19 and 21-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17, 19 and 21-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 3, 4, 5, 6, 7, 12, 17, 19, 21, 22, 23, 24, 25, 28, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gotwald in view of Chiang in further view of Zheng.

Referring to claim 1, Gotwald discloses a method of transmission of digital information in a digital broadcast system comprising a central transmission station and at least one decoder (column 3, lines 26-27, 51-52), the central station transmitting at least one transport stream (column 4, lines 8-9) comprising a stream of packets encapsulating data sections within their payloads (column 4, lines 31-32).

Gotwald does not disclose a method wherein at least one encapsulated section includes a medium access control (MAC) address used to control the reception thereof by the at least one decoder, wherein the MAC address is dynamically assigned by the

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central transmission station and communicated to said at least one decoder using a fixed internet protocol (IP) address in an address assignment message.

Chiang discloses a method wherein at least one encapsulated section includes a medium access control (MAC) address used to control the reception thereof by the at least one decoder (figure 5), wherein the MAC address is dynamically assigned by the central transmission station and communicated to said at least one decoder (column 9, lines 36-38) using a fixed internet protocol (IP) address in an address assignment message (column 7, lines 39-40).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the method of dynamically assigning MAC addresses, as taught by Chiang, in the method disclosed by Gotwald. The motivation would have been to enable the priorities disclosed by Gotwald (column 5, lines 4-5).

Gotwald and Chiang do not disclose a method wherein the at least one MAC address is based on a type of service requested by the decoder, wherein the type of service requested is one selected from the group consisting of a multicast service, a connected unicast service, and a non-connected unicast service.

Zheng discloses a method wherein the at least one MAC address is based on a type of service requested by the decoder, wherein the type of service requested is one selected from the group consisting of a multicast service (column 3, lines 18-22); a connected unicast service, and a non-connected unicast service.

At the time of the invention it would have been obvious for one of ordinary skill in the art to add assigning the MAC address depending on service type, as taught by

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Zheng, in the method disclosed by Gotwald and Chiang. The motivation would have been to use enable more devices to be connected, by only distributing unique MAC address to unicast streams.

Claim 21 is rejected on the same grounds as claim 1.

Referring to claim 2, Gotwald discloses a method as claimed in claim 1, wherein said at least one encapsulated section corresponds to at least one datagram section (column 5, line 13) used to contain internet protocol data (column 4, lines 31-32), the data contained within a datagram section also including the fixed IP address (Note: in the specification the applicant has noted that in a system that adheres to the TCP/IP protocol, that the "datagram is normally addressed at the network layer with an IP address" (page 2, lines 4-5)).

Referring to claim 3, Gotwald discloses a method as claimed in claim 1, wherein said at least on encapsulated section transmitted to said at least one decoder and identified by an access control address is communicated from the central transmission station to said at least one decoder via a telecommunications network (column 3, lines 48-49).

Referring to claims 4 and 5, Gotwald does not disclose a method as claimed in claim 1, wherein the address assignment message is sent in response to a MAC address request sent to the central station by the at least one decoder; wherein the

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address assignment message is communicated back to the at least one decoder from the central transmission station via a telecommunications network.

Chiang discloses a method as claimed in claim 1, wherein the address assignment message is sent in response to a MAC address request sent to the central station by the at least one decoder (column 9, lines 36-38); wherein the address assignment message is communicated back to the at least one decoder from the central transmission station via a telecommunications network (figure 2, part 212).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the method of dynamically assigning MAC addresses, as taught by Chiang, in the method disclosed by Gotwald. The motivation would have been to enable the priorities disclosed by Gotwald (column 5, lines 4-5).

Referring to claim 6, Gotwald discloses a method as claimed in claim 4, wherein the MAC address request sent by the at least one decoder includes an Internet protocol number identifying that decoder to the central transmission station (column 5, lines 4-6; Note: the IP address would have to be known to send data to a device without a fixed MAC address).

Referring to claim 7, Gotwald does not disclose a method as claimed in claim 4, wherein the MAC address request includes an operator identity value associated with the subscription of the owner of the decoder to the services proposed by an operator broadcasting information via the central transmitting means.

Chiang discloses a method as claimed in claim 4, wherein the MAC address request includes an operator identity value associated with the subscription of the owner of the decoder to the services proposed by an operator broadcasting information via the central transmitting means (column 7, lines 39-40).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the method of dynamically assigning MAC addresses, as taught by Chiang, in the method disclosed by Gotwald. The motivation would have been to enable the priorities disclosed by Gotwald (column 5, lines 4-5).

Referring to claim 12, Gotwald discloses a method as claimed in claim 1, wherein the address assignment message further includes information to enable said at least one decoder to select a packet transport stream containing the data associated with the MAC address amongst a plurality of transport packet streams (column 5, lines 29-32; Note: it is well known that IP data includes a MAC address).

Referring to claim 17, Gotwald discloses a method as claimed in claim 1, wherein at least some of the data encapsulated within a packet payload is encrypted (column 4, lines 49-51).

Referring to claim 19, Gotwald discloses a method of communication of datagram packets in a digital communication network comprising at least one central control station and a plurality of remote terminals (column 3, lines 26-27, 51-52; column

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1, lines 60-62), in which the datagram packets (column 5, line 13) includes an internet protocol address (column 5, lines 4-5) associated with a second communication layer of the network.

Gotwald does not control a method in which the at least one medium access control address is dynamically assigned by the central control station in response to a request from a remote terminal.

Chiang discloses a method in which the at least one medium access control address is dynamically assigned by the central control station in response to a request from a remote terminal (column 31, lines 41-43 and 44-49; figure 3).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the method of dynamically assigning MAC addresses, as taught by Chiang, in the method disclosed by Gotwald. The motivation would have been to enable the priorities disclosed by Gotwald (column 5, lines 4-5).

Gotwald and Chiang do not disclose a method wherein the at least one MAC address is based on a type of service requested by the decoder, wherein the type of service requested is one selected from the group consisting of a multicast service, a connected unicast service, and a non-connected unicast service.

Zheng discloses a method wherein the at least one MAC address is based on a type of service requested by the decoder, wherein the type of service requested is one selected from the group consisting of a multicast service (column 3, lines 18-22), a connected unicast service, and a non-connected unicast service.

At the time of the invention it would have been obvious for one of ordinary skill in the art to add assigning the MAC address depending on service type, as taught by Zheng, in the method disclosed by Gotwald and Chiang. The motivation would have been to use enable more devices to be connected, by only distributing unique MAC address to unicast streams.

Referring to claim 22, the claim is rejected because it has the same limitations as rejected claim 2.

Referring to claim 23, Gotwald discloses an apparatus as claimed in claim 21, comprising means for communicating to said decoder via a telecommunications network at least one encapsulated section identified by the MAC address (column 3, lines 48-49 and 56-57).

Referring to claims 24 and 25, Gotwald does not disclose an apparatus as claimed in claim 21, comprising means for receiving from a decoder a MAC control address request, said apparatus being adapted to communicate the address assignment message to the decoder in response to said MAC address request; adapted to communicate said address assignment message to said decoder via a telecommunications network.

Chiang discloses an apparatus as claimed in claim 21, comprising means for receiving from a decoder a MAC control address request, said apparatus being adapted

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to communicate the address assignment message to the decoder in response to said MAC address request; adapted to communicate said address assignment message to said decoder via a telecommunications network (column 9, lines 36-38; figure 2, part 212).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the method of dynamically assigning MAC addresses, as taught by Chiang, in the method disclosed by Gotwald. The motivation would have been to enable the priorities disclosed by Gotwald (column 5, lines 4-5).

Referring to claim 28, the claim is rejected because it has the same limitations as rejected claim 12.

Referring to claim 33, Gotwald discloses an apparatus as claimed in claim 21, comprising means for encrypting data encapsulated within a packet payload (column 4, lines 49-51).

Claims 8-10, 13, 14, 26, 27, 29, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gotwald in view of Chiang in view of Zheng as applied to claim 4 above, and further in view of Mao.

Referring to claim 8, Gotwald, Chiang, and Zheng do not disclose a method as claimed in any of claims 4, wherein the MAC address request includes an indication of

whether the decoder wishes to receive messages in one of a unicast and a multicast mode.

Chiang discloses method where the request is the request for the MAC address (see rejection of claim 1).

Mao discloses a method as claimed in any of claims 4, wherein the request includes an indication of whether the decoder wishes to receive messages in one of a unicast and a multicast mode (column 6, lines 55-61).

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the method disclosed by Gotwald, Chiang, and Zheng to offer the subscriber to choose between multi- and uni-cast streams from the network head. The motivation for doing so would have been to enable the subscriber to observe either general media or personalized media (column 6, lines 58-61).

Referring to claims 9, Gotwald, Chiang, and Zheng do not disclose a method as claimed in claim 8 wherein the address assignment message sent by central transmitting station contains a unique access control address in response to a unicast address request and a shared control address in response to a multicast address request.

Chiang discloses method where the request is the request for the MAC address (see rejection of claim 1).

Mao discloses a method as claimed in claim 8 wherein the address assignment message sent by central transmitting station contains a unique access control address

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in response to a unicast address request and a shared control address in response to a multicast address request (column 6, lines 48-53, 55-61).

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the method disclosed by Gotwald, Chiang, and Zheng to offer the subscriber to choose between multi- and uni-cast streams from the network head. The motivation for doing so would have been to enable the subscriber to observe either general media or personalized media (column 6, lines 58-61).

Claim 26 is rejected on the same grounds as claim 9.

Referring to claim 10, Chiang disclose a method wherein the unicast address is a dynamic address assigned at the beginning of a session, in response to the address request received from the decoder (column 9, lines 36-38).

For motivation see the rejection of claim 1.

Claim 27 is rejected on the same grounds as claim 10.

Referring to claim 13, Gotwald, Chiang, and Zheng do not disclose a method as claimed in any preceding claim in which the address assignment message further includes information to enable said at least one decoder to select the service containing the data associated with the access control address from a plurality of services within a transport packet stream.

Mao discloses a method as claimed in any preceding claim in which the address assignment message further includes information to enable said at least one decoder to

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select the service containing the data associated with the access control address from a plurality of services within a transport packet stream (column 6, lines 48-53, 55-61).

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the method disclosed by Gotwald, Chiang, and Zheng to allow the subscriber to access a plurality of services from within the transport stream. The motivation for doing this would have been to give the subscriber the ability to access general media, or personalized media, all from the same service (column 6, lines 58-61)

Referring to claim 29, the claim is rejected because it has the same limitations as rejected claim 13.

Referring to claim 14, Gotwald, Chiang, and Zheng do not disclose a method as claimed in claim 13 wherein the address assignment message further includes information regarding the data streams carried by that service and identifying the data stream containing the packetised data associated with the assigned MAC address.

Mao discloses a method as claimed in claim 13 wherein the address assignment message further includes information regarding the data streams carried by that service and identifying the data stream containing the packetised data associated with the assigned MAC address (column 6, lines 55-61).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the multicast method, taught by Mao, in the method disclosed by Gotwald, Chiang, and Zheng. The motivation would have been to allow for the headend to send

a message to every subscriber without having addressing each separately, which would improve performance.

Claim 30 is rejected on the same grounds as claim 14.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gotwald in view of Chiang in view of Zheng as applied to claim 4 above, and further in view of Hakulinen.

Referring to claim 11, Gotwald, Chiang, and Zheng do not disclose a method as claimed in any of claims 4, in which the address request message includes an indication of whether the decoder will remain connected to receive data via a telecommunications network after the communication of the address request message.

Hakulinen discloses a method as claimed in any of claims 4, in which the address request message includes an indication of whether the decoder will remain connected to receive data via a telecommunications network after the communication of the address request message (page 5, lines 12-15; Note: for this device to stay connected it would be required to send another request which is being interpreted as equivalent to indicating that the device should remain connected in a request message).

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the method disclosed by Gotwald, Chiang, and Zheng to give up the connection when the transmission was over. The motivation for doing this would have been to enable the network resources to return to the network when a subscriber was finished accessing them.

Claims 15 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gotwald in view of Chiang in view of Zheng as applied to claim 1 above, and further in view of Edens.

Referring to claim 15, Gotwald, Chiang, and Zheng do not disclose a method as claimed in any preceding claim in which the central transmission station dynamically controls which transport packet stream amongst a plurality of transport packet streams is used to carry encapsulated packet data addressed for said at least one decoder.

Edens discloses a method as claimed in any preceding claim in which the central transmission station dynamically controls which transport packet stream amongst a plurality of transport packet streams is used to carry encapsulated packet data addressed for said at least one decoder (column 33, lines 39-47).

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the method disclosed by Gotwald, Chiang, and Zheng to dynamically control which packet stream is used to carry data to subscribers. The motivation for doing this would have been to enable more bandwidth to be dedicated to certain subscribers (column 33, lines 43-44)

Referring to claim 31, the claim is rejected because it has the same limitations as rejected claim 15.

Claims 16 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gotwald in view of Chiang in view of Zheng as applied to claim 1 above, and further in view of Nandikonda.

Referring to claim 16, Gotwald, Chiang, and Zheng do not disclose a method as claimed in any preceding claim in which the central transmission station dynamically controls which service amongst a plurality of services on which encapsulated packet data addressed to said at least one decoder is broadcast.

Nandikonda discloses a method as claimed in any preceding claim in which the central transmission station dynamically controls which service amongst a plurality of services on which encapsulated packet data addressed to said at least one decoder is broadcast (column 7, lines 6-9, 55-60).

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the method disclosed by Gotwald, Chiang, and Zheng to dynamically control which services were transmitted in which packets. The motivation for doing this would be to enable the easy separation of data at the receiving end (column 7, lines 58-59).

Referring to claim 32, the claim is rejected because it has the same limitations as rejected claim 16.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin E. Shepard whose telephone number is (571) 272-5967. The examiner can normally be reached on 7:30-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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